



CKET No.:

UNT-0004 (120746.00004)

PATENT

In the Claims:

PLEASE AMEND CLAIMS AS FOLLOWS:

14. (Amendé) A monoclonal antibody produced by:

(a) injecting an animal with [a synthetic or recombinant proteinaceous molecule or biological equivalent of a natural killer cell surface receptor to produce an immunized animal] a proteinaceous molecule to produce an immunized animal;

(b) harvesting spleen cells from the immunized animal to give harvested spleen cells;

(c) fusing the harvested spleen cells with an immortal cell line to produce a fusion cell line;

(d) screening the fusion cell line to identify cells that specifically produce a monoclonal antibody with affinity toward the [synthetic or recombinant proteinaceous molecule or biological equivalent] proteinaceous molecule having sequence homology to the specific portion the natural killer cell surface receptor; and

(e) selecting and expanding the fusion cell line only with cells that specifically produce the monoclonal antibody,

wherein, the proteinaceous molecule further comprises a synthetic proteinaceous molecule, or a recombinant proteinaceous molecule having a peptide sequence:

CQNRNRERVDFP (SEQID#3);

CMEHGEEDEVIIY (SEQID#4);

CQEEYEEKKRVDICRE (SEQID#5); or combination thereof.

15. (Original) The monoclonal antibody of claim 14, wherein the immunized animal comprises a mouse.

16. (Original) The monoclonal antibody of claim 14, wherein the immortal cell line comprises a myeloma.

17. (Cancel) The monoclonal antibody of claim 14, wherein the synthetic proteinaceous molecule or biological equivalent of the natural killer cell surface receptor has a predicted peptide sequence homologous to a subset of a CD2 family of receptors.
18. (Cancel) The monoclonal antibody of claim 14, wherein the synthetic proteinaceous molecule or biological equivalent of the natural killer cell surface receptor comprises a CS1 receptor.
19. (Cancel) The monoclonal antibody of claim 14, wherein the synthetic proteinaceous molecule or biological equivalent of the natural killer cell surface receptor comprises a peptide of about 25 to about 50 amino acid residues.
20. (Amended) The monoclonal antibody of claim [19] 14, wherein the [peptide of about 25 to about 50 amino acid residues] proteinaceous molecule is linked to an immunological adjuvant.
21. (Amended) The monoclonal antibody of claim 14, wherein the [recombinant proteinaceous molecule or biological equivalent of the natural killer cell surface receptor] proteinaceous molecule comprises a fusion protein.
22. (Amended) The monoclonal antibody of claim 21, wherein the fusion protein comprises [CS1] the proteinaceous molecule-GST.
23. (Canceled) The monoclonal antibody of claim 14, wherein the synthetic or recombinant proteinaceous molecule or biological equivalent of the natural killer cell surface receptor comprises a peptide sequence of SEQ ID NO. 2
24. (Canceled) The monoclonal antibody of claim 14, wherein the synthetic or recombinant proteinaceous molecule or biological equivalent of the natural killer cell surface receptor comprises CS1.
25. (Amended) A fusion cell line produced by:

- (a) injecting an animal with [a synthetic or recombinant proteinaceous molecule or biological equivalent of a natural killer cell surface receptor to produce an immunized animal] a proteinaceous molecule to produce an immunized animal;
- (b) harvesting spleen cells from the immunized animal to give harvested spleen cells;
- (c) fusing the harvested spleen cells with an immortal cell line to produce a fusion cell line;
- (d) screening the fusion cell line to identify cells that specifically produce a monoclonal antibody with affinity toward the [synthetic or recombinant proteinaceous molecule or biological equivalent] proteinaceous molecule having sequence homology to the specific portion the natural killer cell surface receptor; and
- (e) selecting and expanding the fusion cell line only with cells that specifically produce the monoclonal antibody,
- wherein, the proteinaceous molecule further comprises a synthetic proteinaceous molecule, or a recombinant proteinaceous molecule having a peptide sequence:
- CONRNRERVDFP (SEQID#3);
- CMEHGEEDEVIIY (SEQID#4);
- CQEEYEEKKRVDICRE (SEQID#5); or combination thereof.

26. (Original) The fusion cell line of claim 25, wherein the immunized animal comprises a mouse.

27. (Original) The fusion cell line of claim 25, wherein the immortal cell line comprises a myeloma.

28. (Canceled) The fusion cell line of claim 25, wherein the synthetic proteinaceous molecule or biological equivalent of the natural killer cell surface receptor has a predicted peptide sequence homologous to a subset of a CD2 family of receptors.

29. (Canceled) The fusion cell line of claim 25, wherein the synthetic proteinaceous molecule or biological equivalent of the natural killer cell surface receptor comprises a CS1 receptor.

30. (Canceled) The fusion cell line of claim 25, wherein the synthetic proteinaceous molecule or biological equivalent of the natural killer cell surface receptor comprises a peptide of about 20 to about 50 amino acid residues.

31. (Amended) The monoclonal antibody of claim [30] 25, wherein the [peptide of about 25 to about 50 amino acid residues] proteinaceous molecule is linked to an immunological adjuvant.

31. (Amended) The fusion cell line of claim 25, wherein the [recombinant proteinaceous molecule or biological equivalent of the natural killer cell surface receptor] proteinaceous molecule comprises a fusion protein.

32. (Amended) The monoclonal antibody of claim 32, wherein the fusion protein comprises [CS1] the proteinaceous molecule-GST.

33. (Canceled) The fusion cell line of claim 25, wherein the synthetic or recombinant proteinaceous molecule or biological equivalent comprises a peptide sequence of SEQ ID NO. 2

34. (Canceled) The fusion cell line of claim 25, wherein the recombinant proteinaceous molecule or biological equivalent of the natural killer cell surface receptor comprises CS1 a receptor.

38. (New) A monoclonal antibody that specifically binds to SEQID#3, or SEQID#4, or SEQID#5.

39. (New) A fusion cell line that produces a monoclonal antibody that specifically binds to SEQID#3, or SEQID#4, or SEQID#5.

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PLEASE CANCEL CLAIMS 17, 18, 19, 23, 24, 28, 29, 30, 34, AND 35 without prejudice.